Course Syllabus

Department: Environmental Conservation and Horticulture

Date: October 25th, 2011

I. Course Prefix and Number: CON 225

   Course Name: Introduction to Wildlife Diseases

   Credit Hours and Contact Hours: 3-3

   Catalog Description including pre- and co-requisites: This course is intended to provide students with a basic understanding of wildlife diseases and environmental contaminants which adversely affect the health of wildlife populations. Infectious and noninfectious wildlife diseases, as well as parasitology, will be explored through discussion, assignments, guest speakers, and the completion of a technical research paper. Students will then be able to apply knowledge of these topics to other aspects of environmental conservation including environmental chemistry, ecology, wildlife rehabilitation, and environmental law.

II. Course Outcomes and Objectives

   Student Learning Outcomes:

   Students will:
   1. Demonstrate their ability to recognize common wildlife diseases and their symptoms. (professional competency)
   2. Analyze the content of scientific journal articles and explain through summary the research presented in the article. (critical thinking)
   3. Demonstrate the ability to identify, locate, evaluate, use, and share information from relevant resources for a research paper. (information resources)
   4. Write a research paper on a disease or parasite of their choice. (written communication)
   5. Use computer applications to create a research paper. (computer literacy)
   6. Present (orally), using PowerPoint, their research project to the class. (oral communication, computer literacy)
   7. Describe the potential impacts of disease on wildlife populations both locally and globally. (global concerns)

   Relationship to Academic Programs and Curriculum:

   This course is an elective in the Conservation Department. It can be used as an elective for any of the Conservation degree programs, or as a general elective for students in the college community.

   College Learning Outcomes Addressed by the Course:

   X writing  X computer literacy
   X oral communications  ☐ ethics/values
   ☐ reading  ☐ citizenship
III. Instructional Materials and Methods

Types of Course Materials:

Students will be able to download a free manual on wildlife diseases from the National Wildlife Health Center website (www.nwhc.usgs.gov) and will be required to purchase a medical dictionary.

Methods of Instruction (e.g. Lecture, Lab, Seminar …):

Methods of instruction will include lecture, guest speakers and review of published journal articles.

IV. Assessment Measures (Summarize how the college and student learning outcomes will be assessed):

Assessment measures will include written exams, the use of computer applications to research a topic and create a research paper, review of technical journal articles and an oral presentation on the research paper topic.

V. General Outline of Topics Covered:

1. Introduction to disease
   - explore definitions of the term "disease"
   - overview of the relationships between disease and other aspects of environmental conservation
   - justification for the study of disease
2. General field procedures for wildlife disease investigation
   - recording and submitting specimen history data
   - specimen collection and preservation
     - film: Collecting Biological Samples from Wild Animals
   - post-mortem examination (necropsy)
     - film: Necropsy of Wild Ungulates
3. Review of a variety of non-infectious and infectious diseases of birds and mammals.
4. Discussion of wildlife rehabilitation
   - Film: Casualties of the Wild: Animal Recovery
5. Forensic investigational techniques for wildlife law enforcement investigations